

Work Order ID 109864

December-04-13 7:54:00 AM

D 3034-1

B 109864

109864

Page 1

Item ID: D3034-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bearpaw

Start Date: 12/04/13 Start Qty: 8.00

8

Cust Item ID:

Required Date: 12/05/13 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3034

Rev C

120

0.00

120

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

CUT BLANK AS PER FILE D3034-1_BLANK

8

0

13.11.24

130

0.00

130

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1- Mill as per Folio FA148 Rev: AA & Dwg D3034 Rev: C
2-Deburr per dwg D3034

7

1

13/12/06

140

0.00

140

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

7

1

13/12/06

Pto -

DQA:

Date: 18/01/02



QA Closed: 01/12/27

Date: 13/12/27

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

| | | | | | |
|--------------------|---|---|------------------------------------|--|--------------------------------------|
| Work Order: 109964 | DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS | | | |
| Part No. P 3034-1 | | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. 13-3383 | | Machining <input checked="" type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> |
| | | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> |
| | | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|----------|------|-----|---|--------------------|--------------------|-------------|-------------------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | 13/12/06 | 130 | 1 | chamfer on hole Ø0,260 Ø 0,93 is oversize | S | SRACP & Destroy | 13/12/06 | DAS 40 9-89 13/12/19 | 13/12/19 |
| Material | | | | Re. Tooling wasn't fully inspectn / setup | 13/12/19 Q52042 | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | \$19.75 | | | |

FAULT CATEGORY

| | | | | |
|--|--|---|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input checked="" type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|--|---|---|--|

Work Order ID 109864

109864

Page 2

December-04-13 7:54:01 AM

Item ID: D3034-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bearpaw
 Start Date: 12/04/13 Start Qty: 8.00 *8* Cust Item ID:
 Required Date: 12/05/13 Req'd Qty: 8.00 *8* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-------------------------------|
| 150 | QC8- Inspect parts - second check | 0.00 | | | | 7 | | | DAS 40 9-89 13/12/19 |
| *150* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 151 | Identify as per dwg & Stock Location: _____ | 0.00 | | | | | | | |
| *151* | | | | | | | | | |
| Packaging | Memo PIP 1098656p | 0.00 | | | | | | | 13/12/20 (7) |
| Packaging | st 269 14 | | | | | | | | |
| 190 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | MLJ 13-12-23 |
| Quality Control | | | | | | | | | |

MB-12-20

Picklist Print

December-04-13 7:54:00 AM

Page 1

Work Order ID: 109864

Parent Item: D3034-1

Parent Item Name: Bearpaw

Start Date: 12/04/13

Required Date: 12/05/13

Start Qty: 8.00

Required Qty: 8.00

Comments:

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| MUHMWB10 | | Purchased | No | | | 120 | sf | 835.0282 | 4.16 | 34 | | Ac 13.12.06 | |
| UHMW 1" Black - 48"x120" | | | | | | | | | | | | | |
| Tivar Mfg.#52480104 | | | | | | | | | | | | | |

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| MAT019 | 835.0281795 | |
| 121278 | 9.62817947 | |
| 122575 | 47.6 | |
| 123229 | 53 | |
| 123704 | 63.8 | |
| 123949 | 6.96 | |
| 124382 | 197.12 | |
| 124758 | 17.52 | |
| 125137 | 170.4 | |
| m126748 | 6 | |
| m127491 | 263 | |

127491 → 34

| | | |
|--------------------------------|---------------|-----------------------------|
| D3034DART AEROSPACE LTD | | Work Order: 109864 |
| Description: Bearpaw | | Part Number: D3034-1 |
| Inspection Dwg: D3034 | Rev: C | Page 1 of 1 |

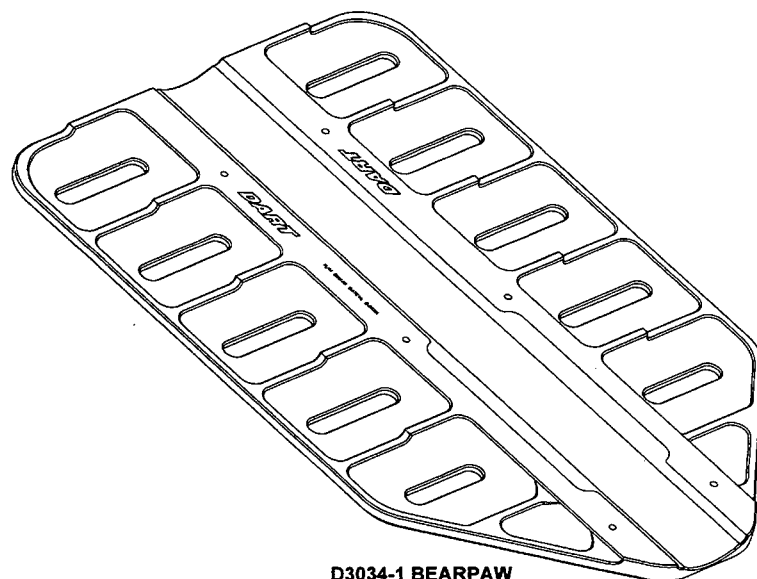
FIRST ARTICLE INSPECTION CHECKLIST

| Inspection Sheet | Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|------------------|-------------------|---------------|------------------|--------|--------|----------------------|--------------|
| A | 11.75 | +/-0.030 | 11.755 | ✓ | | CNC-02 | Vmm |
| B | 3.40 | +/-0.030 | 3.403 | ✓ | | MIP-04 | Vmm |
| C | 19.00 | +/-0.030 | 19.000 | ✓ | | MIP-07 | Tape |
| D | 0.375 | +/-0.010 | 0.382 | ✓ | | MIP-04 | Vmm |
| E | 0.950 | +0.030/-0.010 | 0.965 | ✓ | | ... | ... |
| F | 0.06 x 45° | +0.030/-0.010 | 0.075 | ✓ | | ... | ... |
| G | 0.25 x 45° | +/-0.030 | 0.250 | ✓ | | 31006 | Height gauge |
| H | R0.25 | +/-0.030 | 0.250 | ✓ | | ... | Radius gauge |
| I | 0.630 | +/-0.030 | 0.616 | ✓ | | MIP-04 | Vmm |
| J | 0.250 | +/-0.010 | 0.243 | ✓ | | ... | ... |
| K | 4.50 | +/-0.030 | 4.500 | ✓ | | ... | ... |
| L | 0.20 | +/-0.030 | 0.197 | ✓ | | MIP-05 | depth mic |
| M | Ø0.260 | +0.005/-0.000 | 0.260 | ✓ | | MIP-04 | Vmm |
| N | Ø0.93 | +/-0.030 | 0.927 | ✓ | | ... | ... |
| O | 0.30 | +0.030/-0.000 | 0.312 | ✓ | | MIP-05 | depth mic |
| P | 28.25 | +/-0.030 | 28.25 | ✓ | | MIP-07 | Tape |
| Q | 0.37 | +/-0.030 | 0.380 | ✓ | | MIP-04 | Vmm |
| R | 4.750 | +/-0.030 | 4.744 | ✓ | | ... | ... |
| S | 9.750 | +/-0.010 | 9.750 | ✓ | | CNC-2 | Vmm |
| T | 11.000 | +/-0.010 | 11.002 | ✓ | | ... | ... |
| U | 8.66 | +/-0.030 | 8.660 | ✓ | | ... | ... |
| V | 5.000 | +/-0.010 | 5.001 | ✓ | | MIP-04 | Vmm |
| | | | | | | | |
| | | | | | | | |

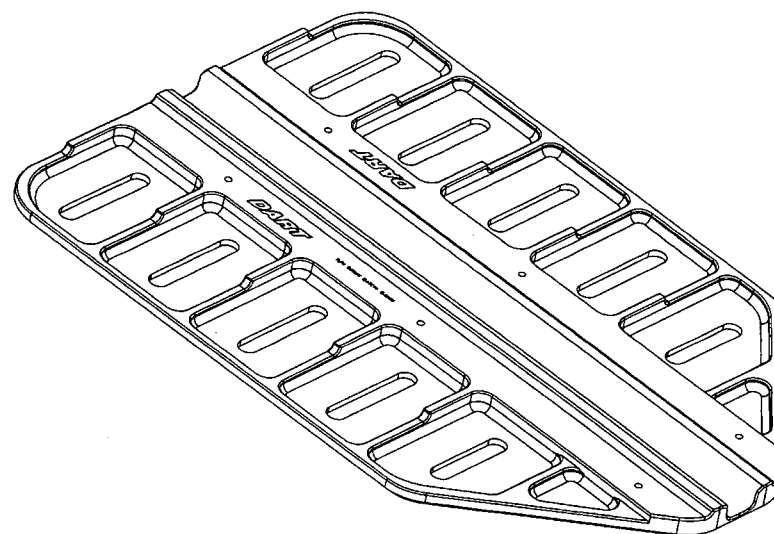
| | | |
|--|---|------------------------------|
| Measured by: <i>[Signature]</i> | Audited by: <i>DAS</i> 40 9-89 | Preliminary Approval: |
| Date: 13/12/08 | Date: 13/12/19 | Date: |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------|------------|----------|
| A | 03.09.22 | New Issue P/O D119-647-011 | KJ/RF | |
| B | 12.07.31 | Dwg Rev updated | KJ | |
| C | 12.10.26 | Dwg Rev updated | KJ | |

8 7 6 5 4 3 2 1



D3034-1 BEARPAW



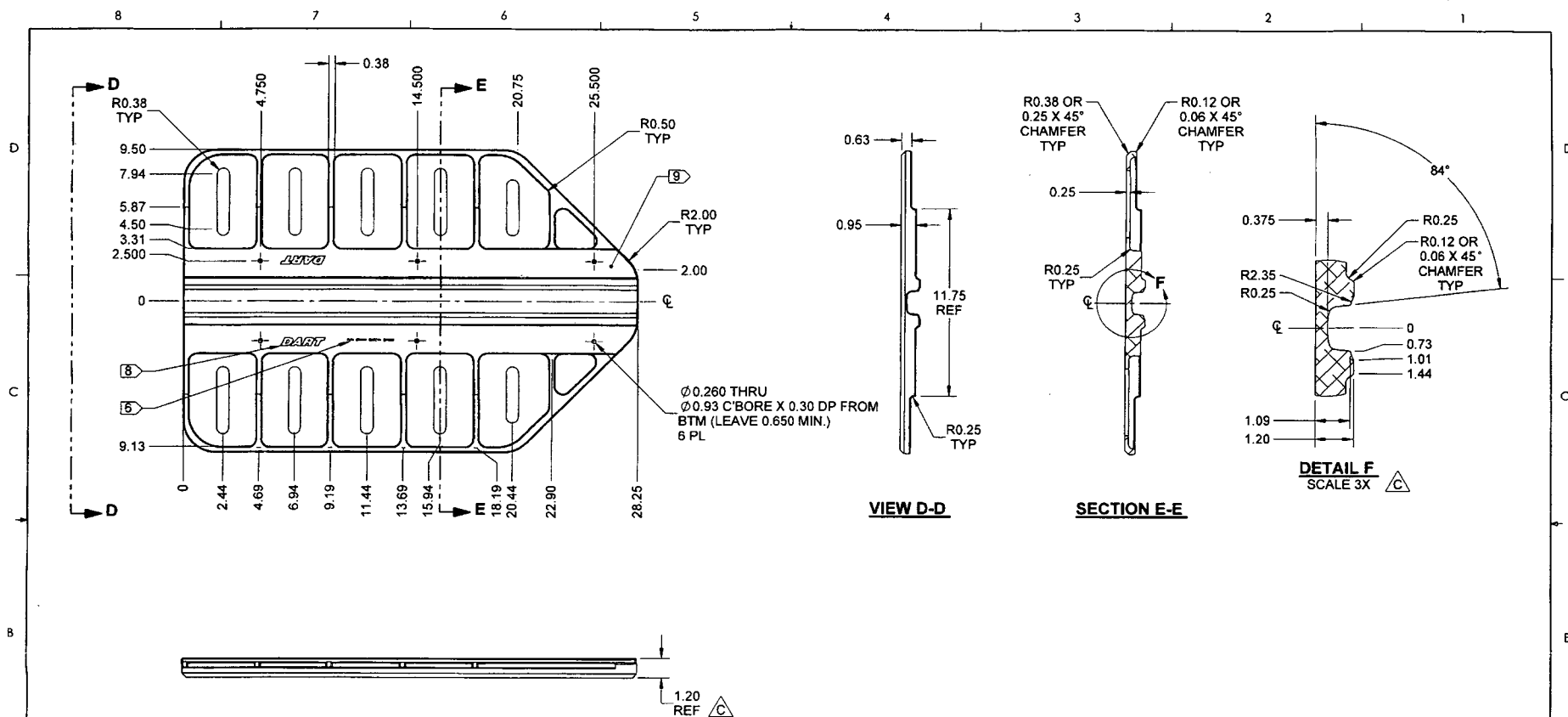
D3034-3 BEARPAW

W/O 109864

RELEASED
12/14/13
ECN 12-671

| | | | |
|------------|---|--|--------------|
| C | MATERIAL THICKNESS WAS 1.00 FOR D3034-3, NOW 1.250 (AB-3). MIDDLE SECTION OF D3034-3 BEARPAW MODIFIED (C2-3). | AP | 12.10.10 |
| B | UPDATE FORMAT; ADD D3034-3; UPDATE NOTE 1 AND ADDED NOTES 8 & 9 (SHEETS 2 & 3) | AP | 12.04.13 |
| A | NEW ISSUE | CP | 01.06.21 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | AP | DART AEROSPACE USA, INC. | |
| DRAWN | AP | KENT, WA | |
| CHECKED | <i>GP</i> | DRAWING NO. | REV. C |
| MFG. APPR. | <i>GP</i> | D3034 | SHEET 1 OF 3 |
| APPROVED | <i>GP</i> | TITLE | SCALE |
| DE APPR. | <i>GP</i> | BEARPAW | NTS |
| DATE | 12.10.10 | <small>COPYRIGHT © 2001 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR CONVEYED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> | |

| | | | |
|------------|--------------------|--|--------------|
| DESIGN | AP | DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D3034 TITLE BEARPAW | REV. C |
| DRAWN | AP | | SHEET 2 OF 2 |
| CHECKED | AP | | SCALE |
| MFG. APPR. | <i>[Signature]</i> | | NTS |
| APPROVED | <i>[Signature]</i> | | |
| DE APPR. | <i>[Signature]</i> | | |
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- NOTES:**
- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL, 1.25 THICK MACHINED TO 1.20 (REF DART SPEC. MUHMWB125)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: ENGRAVE PART NUMBER "D3034-3" AND BATCH NUMBER "BXXXXX" IN ACCORDANCE WITH QSI 044 METHOD 6.3
 - 7) WEIGHT: 8.59 lbs
 - 8) ENGRAVE DART LOGO TO MAX DEPTH OF 0.012
 - 9) APPLY R0.12 RADIUS OR 0.06 X 45° CHAMFER TO ALL EDGES ON SIDE SHOWN UNLESS OTHERWISE INDICATED
 - 10) PROFILE PER DRAWING FILE "D3034-3-REV.C.STP"

RELEASED
12/14/23

| | | | |
|------------|----|---|------------------------|
| DESIGN | AP | DART AEROSPACE USA, INC. KENT, WA | |
| DRAWN | AP | | |
| CHECKED | AP | DRAWING NO. D3034 | REV. C SHEET 3 OF 3 |
| MFG. APPR. | AP | TITLE BEARPAW | SCALE NTS |
| DE APPR. | AP | DATE 12.10.10 | |

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